



ERGO-Flex arm  
hanging version

### Application

The ERGO-Flex extraction arms are designed for dust and welding fume extraction, as well as for capturing other fine-grained dust. The pollutants are captured directly from the emission source, in a way avoiding their expansion in the process room and being inhaled by people. These arms are manufactured in a hanging or standing version. The extraction arm can work independently with a single extraction fan or in a group of local exhausts connected to the main collecting ductwork with a central fan.

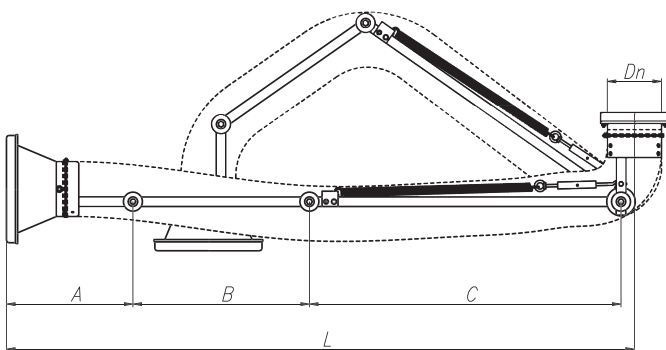
### Structure

The extraction arm consists of following assemblies:

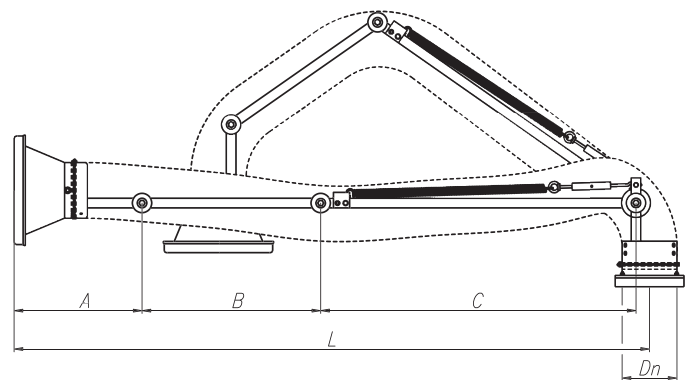
- swivel
- hood with a shut-off damper
- hose – sleeved onto the supporting structure of aluminium profiles.
- tension spring – to hold the extraction arm in balance.

For installing the arm on the wall or column serves the wall bracket, where additionally can be fastened an appropriate fan or connection ferrule. Adequately adjusted frictional joints working with a spring ensure a comfortable arm manoeuvring and it is easy to change the arm position. The hood can be equipped with a halogen spotlight to light up the workplace. The ERGO-Flex extraction arm is manufactured in a nominal diameter 160 mm. Whereas the recommended volume flow is 1000 m<sup>3</sup>/h.

Hanging version



Standing version

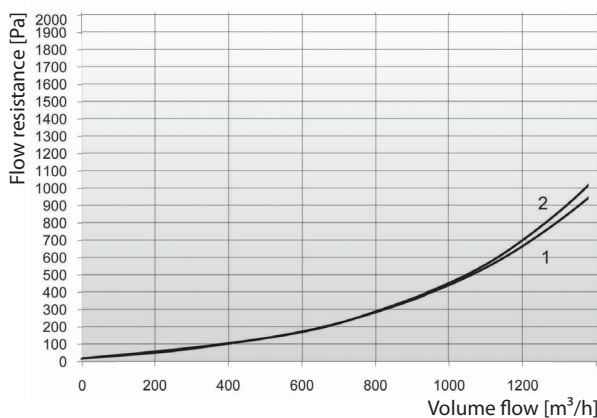


### Technical data

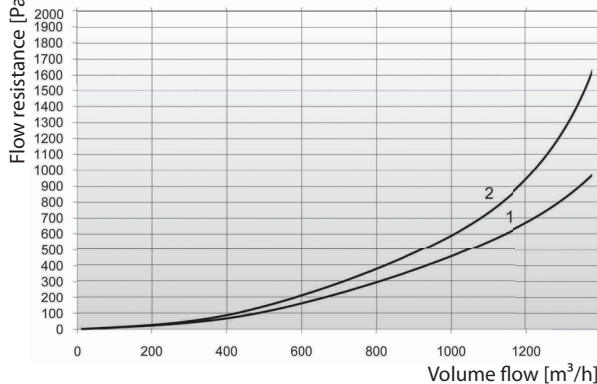
Type	Part.No	Dimensions					Weight [kg]
		A [mm]	B [mm]	C [mm]	L [m]	Dn [mm]	
ERGO-Flex-2	811R82	396	553	976	2	175	6
ERGO-Flex-3	811R83	396	953	1531	3	175	8
ERGO-Flex-4	811R84	396	1253	2031	4	175	9
ERGO-Flex-2-R	811R85	396	553	976	2	175	6
ERGO-Flex-3-R	811R86	396	953	1531	3	175	8
ERGO-Flex-4-R	811R87	396	1253	2031	4	175	9



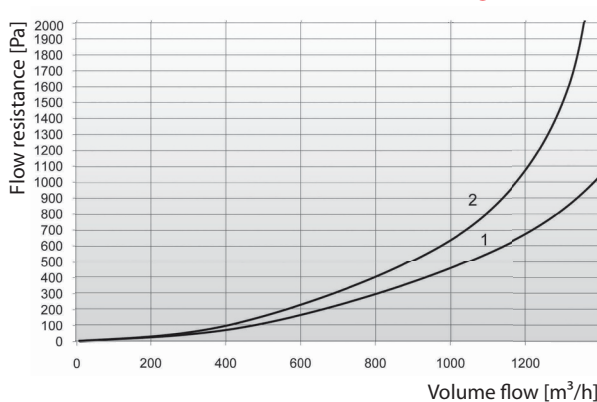
Flow charts ERGO-Flex – workrange 2m



Flow charts ERGO-Flex – workrange 3m



Flow charts ERGO-Flex – workrange 4m



**Suction hood**

Sort of the hood	Material	Type	Part.No	D [mm]	D [mm]	L [mm]	Weight [kg]	Equipped with
	aluminium	LSO/Flex	810H42	173	336	226,5	1	- replaceable inlet mesh - shut-off damper
	aluminium	LLO/Flex	810H43	173	336	226,5	1,4	- replaceable inlet mesh - halogen spotlight 12V - switch - shut-off damper

**Inlet mesh for the ERGO-Flex hoods**

	Type	Part.No	Weight [kg]
	WOL	834Z33	0,10

**Wall brackets**

Sort of the bracket	Material	Type	Part.No	L [mm]	Weight [kg]
	steel sheet	WB-ERGO L/S	817W27	277	9



## Application

The ERGO-L/Z-...Ex extraction arms are designed for capturing the dust and gases arising during technological processes, especially in areas of explosion risk, where explosive atmosphere can occur, as a mixture of flammable substances in form of dust or gases with the air.

ERGO-L/Z-...Ex extraction arms are classified as devices of group II, category 2, of gaseous risk G and dust risk D.

The devices ensure high level of protection, therefore they can be applied in areas 1(G) or 21(D). Admissible temperature of the forwarded air is +70°C.

## Structure

ERGO-L/Z/Ex extraction arms consist of following assemblies:

- full-rotation swivel – stainless steel
- circular hood – stainless steel
- two pipe segments integrated by frictional joints – all elements are of stainless steel
- frictional spacers made of textolite
- gas springs of stainless steel
- shut-off damper located in the pipe segment near above the hood – stainless steel
- hose sections (joining the pipe segments) – made of polyurethane conducting electrical charges and a steel wire spiral.

Superficial resistance <math><10^6\Omega</math>. Elements of steel plate, pipes and stainless profiles are made of material 1.4301 according to PN-EN 10088, whereas screw materials, washers and rivets are of material A2 according to PN-EN ISO 7089.

All constructional elements are joined together by copper cables to conduct the electrostatic charges to the grounding installation.

**ERGO-L/Z/Ex extraction arms are manufactured according to ATEX 95 (94/9/WE) Directive and have Type Research Certificate No 254/CW/001/07 issued by Technical Supervision Office in Poland.**